

-42-

## CLAIMS

1. A paint manufacturing method characterized  
in that at least one of following processes (A) through  
5 (E) is performed by using a communication network in the  
processes (A) through (E).

(A) a process of a color coating system  
informing a paint manufacture data management system of a  
color concept or a color sample;

10 (B) a process of the paint manufacture data  
management system receiving the information of the color  
concept or the color sample, creating colors corresponding  
to the color concept or the color sample by color creation  
means, and performing color presentation by informing the  
15 color coating system and/or a coated product sales system  
of the colors;

(C) a process of the color coating system and/or  
the coated product sales system informing the paint  
manufacture data management system of color image  
20 information for correcting a color selected from the  
created colors;

(D) a process of the paint manufacture data  
management system performing color tuning based on the  
color image information and approving, together with the  
25 color coating system and/or the coated product sales  
system, a color as a design master, the color being  
determined as a result of repeating the provision of the  
color image information and the color tuning through  
mutual communication between the paint manufacture data  
30 management system and the color coating system and/or the  
coated product sales system; and

(E) a process of determining a selected color  
and paint for developing the color of the design master

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and creating paint mixture data by mutual communication of the paint manufacture data management system and the color coating system.

5           2. The paint manufacturing method as claimed in claim 1, characterized in that, in a case where a color contest is held among competitive companies so that a color of another company is determined as a design master, the paint manufacture data management system makes a  
10 duplicate panel from the design master of the other company and the duplicate panel is treated as the design master in said process. (D).

15           3. The paint manufacturing method as claimed in claim 1, characterized in that the color presentation in said process (B) and the color tuning in said process (D) are performed by the paint manufacture data management system providing color data for three-dimensional image display which color data is based on multi-angular  
20 spectral reflectance so that the colors are displayed in three-dimensional images on a monitor of the color coating system and/or a monitor of the coated product sales system.

25           4. The paint manufacturing method as claimed in claim 1, characterized in that the color presentation in said process (B) includes at least one of coating workability information, paint film performance information, and price information.

30           5. The paint manufacturing method as claimed in claim 1, characterized in that a display monitor employed in the color coating system and/or a display monitor employed in the coated product sales system in said

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-44-

processes (B), (C), and (D) are/is equal in type, model, and adjustment to a standard monitor provided in the paint manufacture data management system.

5                   6. The paint manufacturing method as claimed in claim 1, further characterized by comprising at least one of:

                  (F) a process of the paint manufacture data management system informing the color coating system  
10 and/or the coated product sales system of a peripheral color created from the design master, and the paint manufacture data management system and the color coating system and/or the coated product sales system mutually checking the peripheral color;

15                   (G) a process of the paint manufacture data management system informing the color coating system of paint film performance of a paint of the selected color selected in said process (E)

20                   (H) a process of the paint manufacture data management system informing the color coating system of price information of the paint of the selected color selected in said process (E).

25                   7. The paint manufacturing method as claimed in claim 1, characterized in that a coating sample is also used in said process (B) and/or said process (D).

30                   8. The paint manufacturing method as claimed in claim 6, characterized in that a coating sample is also used in said process (F).

                  9. The paint manufacturing method as claimed in claim 1, characterized in that an end user of a coated

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-45-

product accesses one of the paint manufacture data management system, the color coating system, and the coated product sales system, and informs the accessed one of the color concept or the color sample and the color  
5 image information of a coated product to purchase.

10. The paint manufacturing method as claimed in claim 1, characterized in that, in the case of coating a colored base material with paint:

10 the paint manufacture data management system or the color coating system informs a base material manufacturing system providing the base material of color information of a base material color in said process (D);

15 the base material manufacturing system and the color coating system thereafter determine a selected base material and the base material color; and

a design master including the selected base material and the base material color is determined thereafter.

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11. The paint manufacturing method as claimed in claim 1, characterized in that the paint manufacture data management system manufactures paint based on mixture data created by the paint manufacture data management  
25 system, or that the paint manufacture data management system informs the color coating system of the mixture data so that the color coating system manufactures the paint based on the mixture data.

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12. The paint manufacturing method as claimed in claim 11, characterized in that a coating contract system of a company related to the color coating system manufactures the paint based on the mixture data of which

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-46-

the color coating system is informed.

13. A coating method characterized in that a paint manufacture data management system provides paint mixture data created by said process (D) of claim 1 so that coating is performed after or while a color coating system or a coating contract system of a company related to the color coating system performs color matching on paint based on the provided mixture data.

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14. The coating method as claimed in claim 13, characterized in that the color coating system or the coating contract system of the company related to the color coating system informs the paint manufacture data management system of at least data for coating conditions which data is used in the coating so that the paint manufacture data management system manages the coating conditions by the data.

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15. The coating method as claimed in claim 13, characterized in that:

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the color coating system or the coating contract system measures a panel coated with a color-matched paint by a colorimeter and compares a measurement thereof and data of a design master; and

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the color matching is performed again if a difference between the coated panel and the design master is larger than or equal to a given one.

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16. A paint manufacture data management system connected via a communication network to a color coating system and/or a coated product sales system, the paint manufacture data management system characterized by

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-47-

comprising:

a communication control part communicating with a plurality of color coating systems and/or coated product sales systems;

5 a color-matching part performing color matching based on information transmitted from the color coating systems and/or the coated product sales systems; and

an image processing part generating images of color-matched coated products.

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17. The paint manufacture data management system as claimed in claim 16, further characterized by comprising one of a price information provision operation part, a paint film performance check operation part, and a  
15 workability check operation part.

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18. The paint manufacture data management system as claimed in claim 16, further characterized by comprising a coating condition correction data file.

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19. The paint manufacture data management system as claimed in claim 16, further characterized by comprising a determined color data file.

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